

## 32-6814: KLK3 Protein

**Alternative Name :** Prostate-specific antigen, PSA, Gamma-seminoprotein, Seminolisin, Kallikrein-3, P-30 antigen, Semenogelase, KLK3, APS, hK3, KLK2A1.

### Description

Source: Escherichia Coli.

Sterile Filtered White lyophilized (freeze-dried) powder.

Kallikrein-3 (KLK3) is a part of the kallikrein-related peptidase family. Kallikreins are a subgroup of serine proteases having various physiological functions. Numerous kallikreins take part in carcinogenesis and some may be prospective cancer and other disease biomarkers. Kallikrein-3 is 1 of the 15 kallikrein subfamily members located in a cluster on chromosome 19 and is a protease present in seminal plasma. KLK3 hydrolyzes semenogelin-1 consequently leading to the liquefaction of the seminal coagulum. KLK3 acts normally in the liquefaction of seminal coagulum, probably by hydrolysis of the high molecular mass seminal vesicle protein. Serum level of the KLK3 protein, called PSA in the clinical setting, is beneficial in the diagnosis and monitoring of prostatic carcinoma.

Kallikrein-3 Human Recombinant produced in E.Coli is a single, non- glycosylated polypeptide chain containing 237 amino acids and having a molecular mass of 26.1kDa.KLK3 is purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 100 µg / 250 µg

**Purification :** Greater than 95.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.

Lyophilized from a 0.2µm filtered concentrated solution in 20mM Tris-HCl, pH 8.0, 150mM NaCl and 3% trehalose.

**Content :** It is recommended to reconstitute the lyophilized Kallikrein-3 in sterile 18M Omega -cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

**Storage condition :** Lyophilized KLK3 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Kallikrein-3 should be stored at 4°C between 2-7 days and for future use below -18°C.Please prevent freeze-thaw cycles.

**Amino Acid :** IVGGWECEKH SQPWQVLVAS RGRAVCGGVL VHPQWVLTAH HCIRNKSVIL LGRHSLFHPE DTGQVFQVSH SFPHPYDMS LLKNRFLRPG DDSSHDLMLL RLSEPAELTDA VKVMDLPTQE PALGTTTCYAS GWGSIEPEEF LTPKQLQCVD LHVISNDVCA QVHPQKVTKF MLCAGRWTGG KSTCSGDSGG PLVCNGVLQG ITSWGSEPCA LPERPSLYTK VVHYRKWIKD TIVANP.